

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: Unknown )  
Filing Date: Unknown )  
Priority Date: 30 September 2000 )  
Applicants: MEDCALF, Christopher )  
For: ON SCREEN DISPLAY )

**PRELIMINARY AMENDMENT**

Director For Patents  
Box: New Application  
Washington, D.C. 20231

Dear Sir:

This is a preliminary amendment to the enclosed application entitled "On Screen Display"  
claiming priority to British Patent Application No. 0023998.8 filed 30 September 2000.

**In the Specification:**

Please amend the specification as follows:

Page 1, after the title, insert the following headers and paragraph:

**--CROSS-REFERENCE TO RELATED APPLICATION**

This application claims priority to British Patent Application No. 0023998.8 filed 30  
September 2000.

**BACKGROUND OF THE INVENTION-**

Page 2, line 5, change "synchronisation" to --synchronization--; line 15, change "signed"  
to --signal--; and before line 17, insert the Header:

**--SUMMARY OF THE INVENTION-**

Page 4, before line 9 insert the following header:

**--BRIEF DESCRIPTION OF THE DRAWINGS--**

Page 4, after line 10, insert the following new paragraph: --Figure 1 shows the system according to the present invention.--

Page 4, before line 11, add the Header:

**--DESCRIPTION OF THE PREFERRED EMBODIMENTS--**

Page 4, line 25, change "synchronisation" to --synchronization--

Page 6, after the last line, insert the following paragraph:

--While the invention has been described with a certain degree of particularity, it is manifest that many changes may be made in the details of construction and the arrangement of components without departing from the spirit and scope of this disclosure. It is understood that the invention is not limited to the embodiments set forth herein for purposes of exemplification, but is to be limited only by the scope of the attached claim or claims, including the full range of equivalency to which each element thereof is entitled.--

**IN THE CLAIMS:**

1. (Amended) A system for the control of the generation of an on-screen display [(OSD)] on a display screen, said system comprising:

[and wherein, upon the deletion, change or movement of an area of a first on screen display], control means for the display continue to operate the system until a request to generate, add or otherwise alter the display of [the said] an area is received upon the deletion, change or movement of an area of a first on screen display whereupon the control means detects whether or not a [Vsync] vertical synchronization signal for the display screen has occurred since the

change to the area of the first display.

2. (Amended) A control system according to claim 1 [characterised in that if the Vsync signal has occurred the] wherein said generation, addition or other alteration with regard to the part of [the OSD] said on-screen display occurs immediately when the vertical synchronization signal has occurred[, whereas if no Vsync signal has occurred then the control means delays the new operation until the Vsync signal has occurred].

3. (Amended) A control system according to claim 1 [characterised in that if the display data buffer memory of a part of the first display is changed, the] wherein said system continues until a request to draw into the previously displayed data buffer of [the] a part of the first display is received when the display data buffer memory of the part of the first display is changed[, at which point, if a Vsync signal has occurred in the intervening period of time the generation of said second display occurs.]

4. (Amended) A control system according to claim 1 [characterised in that if a part of the first display is moved, the] wherein said system continues when part of the first display is moved until a request to draw into its display data buffer memory is received. [at which time the processing proceeds immediately if a Vsync signal has occurred since the movement of the part of the first display, otherwise the command to redraw the display waits for a Vsync signal to occur.]

5. (Amended) A system according to claim 1 [characterised in that Typically, if a region

of the first OSD is deleted, the] wherein said system continues in operation until a request to create a new region is made when a region of the first on-screen display is deleted. [and at that time, if a vsync signal has occurred since the deletion, the creation can take place immediately but, if not, the creation is delayed until the vertical sync signal occurs.]

6. (Amended) A system according to claim 1 [characterised in that the] wherein said system is controlled with regard to the occurrence of the [vsync] vertical synchronization signal with respect to those changes in [the OSD] said on-screen display which would not cause an artefact to be [created] created on screen.

7. (Amended) A system according to claim 1 [characterised in that] wherein when the request for an alteration is made, the first [OSD] said on-screen display display continues to be displayed until the generation of the change occurs.

8. (New) A control system according to claim 1 wherein said control means delays a new operation until the vertical synchronization signal has occurred.

9. (New) A control system according to claim 3 wherein the generation of a second display occurs when a vertical synchronization signal has occurred in the intervening period of time.

10. (New) A control system according to claim 4 wherein processing proceeds immediately when a vertical synchronization signal has occurred since the movement of the part of the first

display, otherwise the command to redraw the display waits for a vertical synchronization signal to occur.

11. (New) A system according to claim 5 wherein said creation may occur immediately when the vertical synchronization signal had occurred since the deletion.

12. (New) A system according to claim 5 wherein the creation is delayed until the vertical synchronization signal occurs.

**REMARKS**

Attached is the clean version of the claims and new paragraphs as required in Section 1.121(4) (ii).

The application should now be in condition for examination, which is respectfully requested.

Respectfully Submitted

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# New Header to be Inserted on Page 1, before line 1:

--CROSS-REFERENCE TO RELATED APPLICATION

This application claims priority to British Patent Application No. 0023998.8 filed 30 September 2000

## BACKGROUND OF THE INVENTION

Header to be inserted into Page 2

## SUMMARY OF THE INVENTION

Replacement Paragraphs to be Inserted into Page 2

In practice, the generation of such artefacts are usually avoided by waiting for the generation of a Vertical synchronization (vsync) signal to occur on the display screen after any change to the linked list has been made.

The aim of the present invention is to provide a method whereby upon changing an OSD, the system can, if necessary, await the vsync signal prior to the new display but, if not necessary, need not wait, thereby avoiding unnecessary delay.

Headers to be Inserted into Page 4:

**BRIEF DESCRIPTION OF THE DRAWINGS**

**DESCRIPTION OF THE PREFERRED EMBODIMENTS**

New Paragraph to be inserted into Page 4:

Figure 1 shows the system according to the present invention.

Replacement Paragraph to be Inserted Into Page 4:

In conventional procedures, when a vertical synchronization pulse occurs at point A in Figure 1, the device register associated with the field at that location is read, and the header of the OSD region it references is also read. At this time,

New Paragraph for Page 6 to be Inserted After the Last Line:

While the invention has been described with a certain degree of particularity, it is manifest that many changes may be made in the details of construction and the arrangement of components without departing from the spirit and scope of this disclosure. It is understood that the invention is not limited to the embodiments set forth herein for purposes of exemplification, but is to be limited only by the scope of the attached claim or claims, including the full range of equivalency to which each element thereof is entitled.

## **Clean Version of the Claims**

1. (Amended) A system for the control of the generation of an on-screen display on a display screen, said system comprising:

control means for the display continue to operate the system until a request to generate, add or otherwise alter the display of an area is received upon the deletion, change or movement of an area of a first on screen display whereupon the control means detects whether or not a vertical synchronization signal for the display screen has occurred since the change to the area of the first display.

2. (Amended) A control system according to claim 1 wherein said generation, addition or other alteration with regard to the part of said on-screen display occurs immediately when the vertical synchronization signal has occurred.

3. (Amended) A control system according to claim 1 wherein said system continues until a request to draw into the previously displayed data buffer of a part of the first display is received when the display data buffer memory of the part of the first display is changed.

4. (Amended) A control system according to claim 1 wherein said system continues when part of the first display is moved until a request to draw into its display data buffer memory is received.

5. (Amended) A system according to claim 1 wherein said system continues in operation until a request to create a new region is made when a region of the first on-screen display is deleted.

6. (Amended) A system according to claim 1 wherein said system is controlled with regard to the occurrence of the vertical synchronization signal with respect to those changes in said on-screen display which would not cause an artefact to be created on screen.

7. (Amended) A system according to claim 1 wherein when the request for an alteration is made, the first said on-screen display continues to be displayed until the generation of the change occurs.

8. (New) A control system according to claim 1 wherein said control means delays a new operation until said vertical synchronization signal has occurred.

9. (New) A control system according to claim 3 wherein the generation of a second display occurs when a vertical synchronization signal has occurred in the intervening period of time.

10. (New) A control system according to claim 4 wherein processing proceeds immediately when a vertical synchronization signal has occurred since the

movement of the part of the first display, otherwise the command to redraw the display waits for a vertical synchronization signal to occur.

11. (New) A system according to claim 5 wherein said creation may occur immediately when the vertical synchronization signal had occurred since the deletion.

12. (New) A system according to claim 5 wherein the creation is delayed until the vertical synchronization signal occurs.